Research Article
AMERICAN JOURNAL OF PHARMACY AND HEALTH RESEARCH
www.ajphr.com
2016, Volume 4, Issue 2
ISSN: 2321–3647(online)

General public awareness, perceptions and observation towards pharmaceutical advertisements in the Dhaka city of Bangladesh: A cross-sectional study

Md. Mosiqur Rahman[1]*
1. Department of Pharmacy, Southeast University, Dhaka, Bangladesh.

ABSTRACT

The main objective of this study was to determine the general public awareness, perceptions and observation toward pharmaceutical advertisements. A cross-sectional study design was carried out in Dhaka city. One hundred and Thirty questionnaires were distributed to the general public using the non probability convenience sampling technique. Majority of them were males and with the age group between 30 and 39 years. Most of the respondents are highly educated. Majority of respondents were aware that only drugs without side effects are allowed to be advertised, medical advertisements should seek government approval and only registered drugs are allowed to be advertised. Health related magazines and advertisement on friends and family members have the highest influence on our respondents. Almost half of our respondents believed that advertised drugs are better than non-advertised drugs and another half disagreed that the quality of the frequently advertised products to be better than those prescribed by healthcare professionals. Side effects were the main things that the investigated sample is looking for once they read a pharmaceutical advertisement. Almost 40% of respondents will request their doctor to prescribe them an advertised drug. Most of respondents indicated that they will not change their current medications to a more frequently advertised drug. This study gives a brief knowledge on public awareness toward pharmaceutical advertisements which help the policy maker to implement their rules and regulations.

Keyword: Pharmaceutical advertisement, Public awareness, Dhaka city, Side effects.

*Corresponding Author Email: mosiqur@gmail.com
Received 18 January 2016, Accepted 08 February 2016

Please cite this article as: Rahman M *et al*., General public awareness, perceptions and observation towards pharmaceutical advertisements in the Dhaka city of Bangladesh: A cross-sectional study. American Journal of Pharmacy & Health Research 2016.

INTRODUCTION

Over the past two decades and to a greater extent recently, the general public has been increasingly exposed to prescription drug advertisements aimed directly at the consumer. The industry's ongoing shift in focus from "physician-directed" to "consumer-directed" advertisements poses a risk to the public health because it may have the effect of misleading consumers by understating a drug's adverse reactions and overstating the benefits. The increase in consumer-directed advertising has helped to promote a health care atmosphere in which it is the patient, and not the medical professional, who initiates a discussion regarding possible drug therapy [1]. Pharmaceutical companies have been spending a great percent of sales on pharmaceutical advertising [2,3]. General public are targeted from most pharmaceutical companies, who are believed to have a major influence on prescribing decisions. Except the USA and New Zealand, Direct-to-consumer advertising (DTCA) is banned in most developed countries[4,5.] Pharmaceutical promotion is monitored by the Code of Conduct for Prescription (Ethical) Products[6]. According to this guideline, only medical professionals can receive promotional material for prescription drugs. Pharmaceuticals are not allowed to advertise pharmaceutical products directly to the public. In reality, pharmaceutical companies try to reach the general public whether directly or indirectly. Pharmaceutical companies spend huge amounts of their sales money on behalf of promotions for two reasons; to inform and persuade 7. For many physicians, especially those who have been practicing medicine for a long time reported that drug promotions are main sources of new drug information which play a vital role in their decision making [8-10]. Moreover, it should be mentioned that promotion efforts are not only restricted to the prescribers, but also to the public. General public find their information about medicines from many kinds of sources, such as television (TV), internet, magazines, health professionals, radio, and newspapers [11]. As a result, influencing general public through these Media might affect prescribing and dispensing decisions. General public might have various responses to pharmaceutical advertisements. These responses varied from one to another person according to their knowledge and perceptions toward pharmaceutical advertisements.

MATERIALS AND METHOD

Study design

A cross-sectional study design was carried out in Dhaka city. One hundred and Thirty questionnaires were distributed to the general public using the non probability convenience sampling technique.

Data collection tool: The questionnaire

The questionnaire was developed after an extensive literature review on the current issue. Questionnaire was divided into six sections. The first section consisted of six demographic questions: gender, age, marital status, educational level, location of work and residence. The second section comprised of six questions to explore respondents' knowledge about pharmaceutical advertisement. The third section included questions to explore the impact of different tools used for pharmaceutical advertisements. Section four included 10 questions to measure respondents' perceptions toward pharmaceutical advertisements. Section five contained a question regarding the type of information that respondents usually look for. The last section investigated the impact of pharmaceutical advertisements on respondents' drug selection.

Inclusion and exclusion criteria

Respondents of this study met the following two criteria: (1) they were 16 years old and above and (2) agreed to give a verbal informed consent. Whereas those below the age of 16 years or refused to give the informed consent were excluded from this study.

Data collection technique

Data collectors met with the respondents in a range of public areas, such as restaurants, shopping malls, bus stations and hospitals. Once the respondents gave their verbal consent to participate in the study, I passed them the questionnaire which needed 10– 15 min for completion.

Statistical analysis

Analysis was conducted by calculating proportions and means for discrete and continuous data.

It is important to be highlighted here that the survey was descriptive and most results are summarized in counts and percentages, some of the questions had multiple options to choose from, total of percentages is not always 100%.

RESULTS AND DISCUSSION

Table 1 shows the demographics of the respondents. A total of 130 respondents successfully responded to this study. Majority of them were males and with the age group between 30 and 39 years. About 63.85% of the respondents are highly educated.

Table 2 summarizes respondents' understandings toward pharmaceutical advertising. Majority of respondents were aware that only drugs without side effects are allowed to be advertised 95(73.08%), medical advertisements should seek government approval 101(82.73%), and only registered drugs are allowed to be advertised 88(67.69%). In addition, 68(52.31%) of respondents said that direct advertising of OTC products to the public is allowed where as

56(43.08%) said that direct advertising of prescribed drugs to the public is allowed. City of living, age, marital status and educational level showed significant variations among responses.

The influence of advertisements on different media is shown in Table 3. Health related magazines and advertisement on friends and family members have the highest influence on our respondents (52.31% and 48.46%, respectively). Advertisements on television and pamphlets/leaflets showed the lowest influence on our respondents (23.85% and 31.54%, respectively). Advertisement on internet and on newspaper showed an excellent influence on respondents.

Table 4 entails respondents' perceptions regarding pharmaceutical advertisements. Almost half of our respondents (49.23%) believed that advertised drugs are better than non-advertised drugs. Whereas 42.30% of the respondents disagreed that the quality of the frequently advertised products to be better than those prescribed by healthcare professionals. Moreover, only 39.23% of our respondents believed that pharmaceutical advertisements help make aware of new drugs.

Table 5 summarizes the type of information that the respondents are interested from any pharmaceutical advertisement. Side effects were the main things that the investigated sample is looking for once they read a pharmaceutical advertisement (70.0%). Whereas ease of use and cost were the last thing respondents were interested to read from the advertisement.

Table 6 shows the influence of pharmaceutical advertisements on respondents' decisions in drug selection. Almost 40% of respondents will request their doctor to prescribe them an advertised drug and only 22.31% and 18.46% of respondents said that they will consult another doctor or change their doctor respectively if he/ she do not prescribe them an advertised drug. Furthermore, more than 23.84% of respondents indicated that they will change their current medications to a more frequently advertised drug.

Table 1: General characteristics of the respondents

Subject	Demographic characteristics	Frequencies (n)	Percentages (%)
Gender	Male	90	69.23
	Female	40	30.77
Age	≤20	16	12.31
	20–29	35	26.92
	30–39	48	36.92
	≥40	31	23.85
Education level	Informal	16	12.31
	Primary	10	7.69
	Secondary	31	23.85
	Tertiary	83	63.85

Marital status	Single	43	33.08
	Married	87	66.92
Working	Health related	19	14.62
	Non health related	111	85.38
Any family member's job is health related?	Yes	38	29.23
	No	92	70.77

Table 2: Respondent's understandings to pharmaceutical advertising

Section	Responses (n) (%)		
	Yes	No	Not sure
Only drugs without any side effects are allowed to be advertised to the public	95(73.08)	14(10.77)	21(16.15)
Medical advertisements should seek government approval	101(82.73)	06(7.27)	23(10)
Only registered drugs are allowed to be advertised	88(67.69)	23(17.69)	19(14.62)
Direct advertising of prescribed drugs to the public is permitted	56(43.08)	51(39.23)	23(17.69)
Direct advertising of over the counter products (OTC) to the public is permitted	68(52.31)	23(17.69)	39(30.0)
Only safe medicines are allowed to be advertised to the public	82 (63.08)	23(17.69)	25(19.23)

Table 3: Influence level of pharmaceutical advertisements on consumers

Questions	Responses				
	E(n)%	G (n)%	A(n)%	P(n) %	VP(n) %
Advertisement on health related magazines	36(27.69)	32(24.62)	25(19.23)	21(16.15)	16(12.31)
Advertisement on television	12(9.23)	19(14.62)	29(22.31)	32(24.62)	38(29.23)
Advertisement on newspapers	18(13.85)	33(25.38)	21(16.15)	32(24.62)	26(20.0)
Advertisement on internet	27(20.77)	21(16.15)	27(20.77)	25(19.23)	30(23.08)
Advertisement on pamphlets/leaflets	17(13.08)	24(18.46)	33(25.38)	23(17.69)	33(25.38)
Advertisement on friends and family members	38(29.23)	25(19.23)	27(20.77)	17(13.08)	13(10.0)

Note: E: excellent, G: good, A: average, P: poor, VP: very poor

Table 4: Public perceptions on pharmaceutical advertisements

Questions	Responses				
	SD(n) %	DA (n)%	N(n)%	A(n) %	SA (n) %
Pharmaceutical advertising provide reliable information regarding a particular medicine	36(27.69)	28(21.54)	23(17.69)	25(19.23)	18(13.85)
Promoted drugs are better than non-advertised drugs	27(20.77)	21(16.15)	18(13.85)	35(26.92)	29(22.31)
Pharmaceutical advertising inform patients of potential side effects	21(16.15)	31(23.85)	23(17.69)	27(20.77)	28(21.54)
The quality of a particular product depends on the frequency of the advertising activities	22(16.92)	33(25.38)	31(23.85)	21(16.15)	23(17.69)

Pharmaceutical advertising increase drug cost	13(10.0)	16(12.31)	19(14.62)	43(33.08)	39(30.0)
I like pharmaceutical advertisements	28(21.54)	41(31.54)	24(18.46)	20(15.38)	17(13.08)
Pharmaceutical advertisements help make me aware of new drugs	27(20.77)	31(23.85)	21(16.15)	23(17.69)	28(21.54)
I support direct to consumer advertising	26(20.0)	35(26.92)	24(18.46)	21(16.15)	24(18.46)
I prefer all drugs to be advertised to the public	32(24.62)	43(33.08)	21(16.15)	19(14.62)	15(11.54)
I prefer only over the counter drugs to be advertised to the public	17(13.08)	18(13.85)	25(19.23)	41(31.54)	29(22.31)

Note: SD: strongly disagree, DA: disagree, N: neutral, A: agree, SA: strongly agree

Table 5: Type of information that respondents are interested in any medical advertisement

Section	Responses (n) (%)	
	Yes	No
Ease of use	45(34.62)	85(65.38)
Side effect	91(70.0)	39(30.0)
Drug–drug interactions	56 (43.08)	74 (56.92)
Cost	38(29.23)	92(70.77)

Table 6: Influence of pharmaceutical advertisements on drug selection by consumers

Questions	Responses				
	SD(n) %	DA (n)%	N(n)%	A(n) %	SA (n) %
I will ask my doctor to prescribe me an advertised medicine	17(13.08)	27(20.77)	34(26.15)	31(23.85)	21(16.15)
I will consult another doctor if he/she does not prescribe me an advertised drug that I requested	29(22.31)	43(33.08)	29(22.31)	19(14.62)	10(7.69)
I will change my doctor to another if he/she does not prescribe me an advertised drug that I requested	32(24.62)	48(36.92)	26(20.0)	17(13.08)	7(5.38)
I will change my current medication to a more frequently advertised medicine	26(20.0)	32(24.62)	41(31.54)	22(16.92)	9(6.92)
I prefer to buy advertised drugs despite their price	27(20.77)	39(30.0)	31(23.85)	18(13.85)	15(11.54)
I would buy an advertised drug without referring to my doctor	22(16.92)	31(23.85)	35(26.92)	28 (21.54)	14(10.77)

Note: SD: strongly disagree, DA: disagree, N: neutral, A: agree, SA: strongly agree

CONCLUSION

The aim of this study highlighted general public awareness, perceptions and observation toward pharmaceutical advertisements. A great percentage of participants do not want to pharmaceutical advertisements because of their major side effects as well as their frequent usage. The respondents realize that the use of drugs without prescription is very dangerous to the human health. Pharmaceutical advertisements provide huge information about drug but people use it according to their own way. So, policy makers have to be concerned about the impact of pharmaceutical advertisements on the public. Hence, enforcement of the regulations and laws regarding protecting the public from the profit oriented organizations is imperative.

ACKNOWLEDGEMENT

I express my gratitude to the respondents who answered the required questions. My special thanks to the Department of Pharmacy, Southeast University, Banani, Dhaka.

REFERENCES

1. William E. Holtz. Consumer-Directed Prescription Drug Advertising: Effects on Public Health. Journal of Law and Health. 1999.
2. Osinga, E.C., Leeflang, P.S.H., Srinivasan, S., Wieringa, J.E., 2010. Why do firms invest in consumer advertising with limited sales response? A shareholder perspective. Journal of Marketing 75, 109–124.
3. Mcfadden, D.W., Calvario, E., Graves, C., 2007. The devil is in the details: the pharmaceutical industry's use of gifts to physicians as marketing strategy. Journal of Surgical Research 140, 1-5.
4. Toiviainen, Hanna, Vuorenkoski, Lauri, Hemminki, E., 2004. Finnish physicians show little support for consumer advertising of prescription drugs. The New Zealand Medical Journal 117, 1–3.
5. Almasi, Elizabeth A., Stafford, Randall S., Kravitz, Richard L., Eld, P.R.M., 2006. What are the public health effects of Direct-to- Consumer drug advertising? PLoS Medicine 3.
6. Pharmaceutical Association of Malaysia, P. 2008. Code of Pharmaceutical Marketing practices for Prescription (Ethical) Products 15th Edition.
7. Dev, S., Pathaka, A.E., Kucukarslanc, Suzan N., 1993. Pharmaceutical promotion: information or persuasion? Journal of Pharmaceutical Marketing & Management 7, 1–4.

8. Vancelik, S., Beyhun, N.E., Acemoglu, H., Calikoglu, O., 2007. Impact of pharmaceutical promotion on prescribing decisions of general practitioners in Eastern Turkey. BMC Public Health 7, 122.
9. Ahmad, M., Akhtar, N., Awan, M.H.A., Murtaza, G., 2011. Ethical evaluation of pharmaceutical marketing in Pakistan. Acta Bioethica 17, 215–224.
10. Katia, Campo, Odette De, Staebel, Els, Gijsbrechts, WaterschooT, W.V., 2005. Physicians' decision process for drug prescription and the impact of pharmaceutical marketing mix instruments. Health Marketing Quarterly, 22.
11. Na¨ rhi, U., Helakorpi, S., 2007. Sources of medicine information in Finland. Health Policy 84, 51–57.